

Klondyke Tailings Water Quality Assurance Revolving Fund (WQARF) Site

Community Advisory Board Meeting

MINUTES

Thursday May 19, 2005
Klondyke School House
500 ft Southwest of 36951 Klondyke Road
Klondyke, Arizona

Ref: OU 05-069

CAB members present: Michael Bryce, Lynn Skinner (co-chair), Bill Griffin, Mark Haberstich, Noralea Gale

Members absent: John Luepke (co-chair), Anne Zapf, Mark Herrington, and Alternates: Sam Sollers, Terry Cooper, Matthew Kent, and James Palmer

ADEQ Staff in attendance: Ed Pond, Project Manager; Wendy Flood, Community Involvement Coordinator; Scott Goodwin, New Project Manager; and Linda Mariner, New Community Involvement Coordinator

Members of the public present: Lauralea Haby Bott, Kathryn Dahl

The meeting began at 4:10 p.m.

The following matters were discussed, considered, and decided upon at the meeting:

1. Welcome and Introductions

Mr. Skinner welcomed CAB members and guests. All present were introduced including the new Klondyke Tailings Project Manager, Scott Goodwin, and the new Community Involvement Coordinator, Linda Mariner, who will be taking over for Ed Pond and Wendy Flood.

2. Acceptance or changes to the November 18, 2004 draft minutes

Ms. Gale moved and Mr. Bryce seconded for the minutes to be accepted as written. Minutes were unanimously accepted.

3. Discussion and Voting of CAB Co-Chairs on Charter – Wendy Flood

The other co-chair, Mr. Luepke, was absent, so this will be discussed at the next meeting. Ms. Flood asked how many CAB members found their charters to review. Four members could not find their charters, so all CAB members will be mailed new charters before next meeting.

4. Discussion and Voting on Absent CAB Members on Attendance – Wendy Flood

Two members have not attended the last several meetings: Anne Zapf and Matthew Kent. Ms. Flood reminded CAB members that the charter states that Co-Chairs can ask absent members to resign. Ms. Flood suggested to the CAB that a letter be sent. Mr. Skinner recommended that the letter be drafted to remind them of what the bylaws say regarding their obligation to the CAB and to ask for a resignation letter if they are not interested in participating. The CAB decided that the Co-Chairs will review the letter before it is sent out.

5. Brief review of current status and activities – Ed Pond

Ed Pond, Project Manager, went through a slide show of updated plans for the Klondyke site. Maps of the area and of the site boundaries were presented. Ed Pond gave a brief background on the site and the task assignments for clean up from the new scope of work.

The site task assignments consist of two phases at this time: 1) Early Response Action (ERA), and 2) Remedial Investigation (RI). The ERA includes arranging for consultants to sample and characterize the old laboratory reagents (chemicals) found on the site in order to decide the proper method for removal and disposal of them, as well as characterizing any buried tanks, drums or other sources of contaminants that may be found during excavation of the site

Mr. Griffin thought that the removal of the old laboratory reagents had already been done. Mr. Pond answered that contracts were not in place yet for that work. However, task assignments have been written for this to be done in a regulatory fashion, but purchase orders should be out for bid in a couple of weeks when the new fiscal year begins in July. Mr. Pond spoke on the possibility of tanks and drums in the area in response to a question. Original anecdotal information from resident interviews indicated that perhaps there were drums or tanks buried on site, so a contractor will investigate that just to make sure it is safe for further remediation efforts. It is important to find out what is going on in the subsurface.

The U of A continues to do their research in regards to the project. They are looking at sources of heavy metals and their methods of transport. The U of A is also looking at the viability of growing vegetation on the pile, which is difficult due to the acidity of the soil. Mr. Pond explained the characteristic of the acids that are in the soil in response to a question. Most of the acidic soil has stayed on site due to the drought.

The next phase on the site will be to conduct the Remedial Investigation (RI). This will include: Monitor well installation, groundwater sampling, surface soil samplings, subsurface soil sampling, stream sediment sampling, and surface water sampling. Ed showed a map of four possible monitor well locations. They will be installed to assess ambient groundwater conditions and the impact on the groundwater from the site. Soil samples will be collected during drilling for chemical analysis to detect if Arsenic, Antimony, Beryllium, Cadmium, Copper, Lead, Manganese, Mercury, Nickel, Zinc, Cyanide, and pH are present. These are the metals of concern along with cyanide and pH.

The question was asked: “Do you anticipate that it will happen right after July?” Mr. Pond’s answer was that the monitoring wells take a while to drill, but will be the first thing done in order to begin groundwater sampling. At the same time (concurrently), surface soil sampling results in the surrounding area would be analyzed for the same metals, cyanide, and pH. This information is necessary in deciding on a proper cleanup plan because it will indicate how widespread the contamination has become horizontally, laterally and depth-wise.

The same kind of remedial investigation must be done with stream sediment. Samples will be collected from Laurel Creek and Aravaipa Creek sediments to determine the extent of contamination and what is coming in from upstream. The main areas of concern are along the side of Laurel Creek and along Aravaipa Creek that borders the tailings piles.

Surface water samples will be collected from Laurel and Aravaipa Creek to assess water quality of the streams at times of runoff from the site. Mr. Pond pointed to the map to show 11 potential sample locations. Samples will be collected upstream of the site to determine if other sources may be contributing to the transport of metals into the drainage system. The same metals, cyanide, and pH analysis will be performed on samples collected during runoff events. Ideally, the perfect situation would be to collect samples from the stream and the tailings sites at the same time. For surface water samples, coordination may be made with someone in the area or a contractor to collect the runoff and surface water samples when it is raining.

The floor was then opened for questions.

Mr. Griffin asked about the money that was approved for last July. He thought \$700,000 had been approved for this fiscal year. The answer given was that some of that money was lost to other higher priority projects in WQARF. However, several important site reports were completed for Klondyke Tailings, like the archeological survey, biological survey and the geomorphology survey.

The results of the floodplain and geomorphology survey state that there is potential impact via erosion by Aravaipa and Laurel Creek. The 10, 25, 50 and 100-year floodplains has been delineated. A flood could cause metals and acidity to run down stream because the stream channel is migrating towards the pile. Discussion was held concerning channelization of the river, the potential impacts and costs related to it.

Mr. Griffin felt that a 20' by 10' dike be built in the stream bed (for \$150,000) and 4 feet of fill (for \$100,000) be spread over the top of the tailings. He felt that for about \$300,000 stream bank protection and a soil cover for the tailings could be built to prevent any erosion off the tailings piles. And then later cement or car bodies could be used to prevent the banks of the channel from washing away. He felt that as a lay person, it seemed a simple way to contain the contamination. If we wait too long, the creek will come along and take it out.

Mr. Pond responded that ADEQ will eventually put in some kind of bank protection along the creek, but not a levee as described by Mr. Griffin. A cover with some native soil on top for vegetation to grow on the piles might also be implemented. ADEQ wouldn't consider anything like a levee/dike in the stream bed or flood plain as described by Mr. Griffin that the creek would wash out in a 100 year flood. Something that's more permanent would be needed.

Mr. Griffin then suggested that a 150 Cadillacs be put in there to keep away flood waters. He recalled how the old pioneers would build a dike and let water keep filling it up until the stream bed went back into its natural course.

Mr. Pond told him that it would be hard selling ADEQ management on old cars. ADEQ's goal is to stay out of the flood plain as much as possible in order to prevent any future problems that might be caused. If remediation in the flood plain an option that is agreed upon, a Clean Water Act permit would be required to stay in compliance with federal laws.

Mr. Griffin has concerns that the stream will continue to take the county road out during flood events. Mr. Pond responded that the State doesn't have any responsibility to protect the county road, but does have a responsibility not to make matters worse due to any remedial action that is taken. He added that ADEQ does a thorough investigation and study before any remedial work is decided.

Mr. Griffin believed that, historically, the stream had never been filled enough to cover the whole channel, so a berm, dike or other control should be able to keep it from eroding the tailings. Mr. Haberstick did not agree with that. He said that, historically, geologists have shown that the whole valley can fill up.

Mr. Pond concluded the discussion by saying that sometimes it's not just the simple answer that is best. ADEQ wants to make sure we do this right and not adversely impact those users upstream and downstream. There are a lot of other significant issues with the site including protecting the Nature Conservancy land and the Aravaipa Creek wilderness area.

6. Annual Registry Report – Wendy Flood

The annual registry report copies were handed out to members for reference or comment. There was no discussion at this time, but any comments can be sent to Ms. Mariner.

7. Call to public: None

8. Future meeting plans:

A tentative date for the next CAB meeting is Thursday, October 6, 2005 from 4 to 6 pm at the school house in Klondyke. Ms. Flood reminded the CAB members that in October, discussion and voting would take place for new co-chairs according to the charter. Ms. Mariner will send all CAB members a copy of the charter to review before the meeting.

Meeting was adjourned at 5:04 p.m.